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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/571,215

11/15/2006

Johannes Deichmann

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10/24/2008

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EXAMINER

MYERS, JESSICA L

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

10/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/571,215	Applicant(s) DEICHMANN ET AL.	
	Examiner JESSICA L. MYERS	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/22/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/8/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/8/06, 11/15/06, 5/22/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

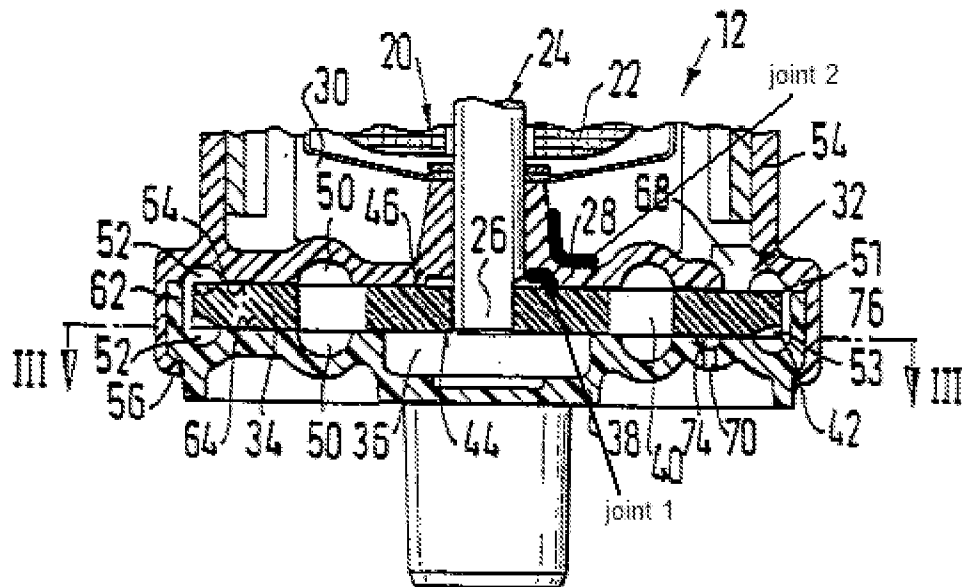
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 6-8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,338,151 to Kemmner et al. (Kemmner et al.).

In Reference to Claim 1

Kemmner et al. teach a fuel feed unit for a motor vehicle (see abstract) having a fuel pump (fuel feed unit (12)) which is driven by an electric motor (electric motor (20)), and having a rotor (impeller (34)) of the fuel pump arranged between two housing parts (dividing wall (28) and cover (38)), the rotor being fastened in a rotationally fixed manner to a shaft of the electric motor (see figure 2 with shaft (24)), characterized in that at least one of the housing parts has an expansion joint (The dividing wall (28) has an axial bearing portion that abuts the shaft (24) and a radial portion that encloses the impeller. There are two joints between the axial and radial portions that would allow the assembly to expand and contract as the temperature in the pump unit increases and decreases, see the figure below).



In Reference to Claim 3

Kemmner et al. teach the fuel feed unit as claimed in claim 1 (see the rejection of claim 1 above), characterized in that the housing part which faces toward the electric motor has a radial section which runs toward the shaft (the portion of the wall (28) which directly abuts the shaft and acts as a bearing for the shaft) and an axial section which leads away from the rotor parallel to the shaft (the portion of the dividing wall (28) that encloses the impeller).

In Reference to Claim 6

Kemmner et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the expansion joint on the axial section runs over the entire height of the radial section (the height of joint 1, as shown in the above figure, is approximately the height of the dividing wall (28)).

Art Unit: 3746

In Reference to Claim 7

Kemmner et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the expansion joint is arranged in the corner region at which the two sections adjoin one another (both joint 1 and joint 2, as shown in the above figure, are located at a corner formed between the axial section and the radial section of the wall).

In Reference to Claim 8

Kemmner et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the expansion joint is arranged on the side of the housing part facing toward the electric motor which faces away from the rotor (joint 2, as defined in the above figure, is arranged on the side of the wall that faces the pump motor).

In Reference to Claim 10

Kemmner et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the axial section and the radial section are produced in one piece (both the axial section and the radial section are formed from the dividing wall (28)).

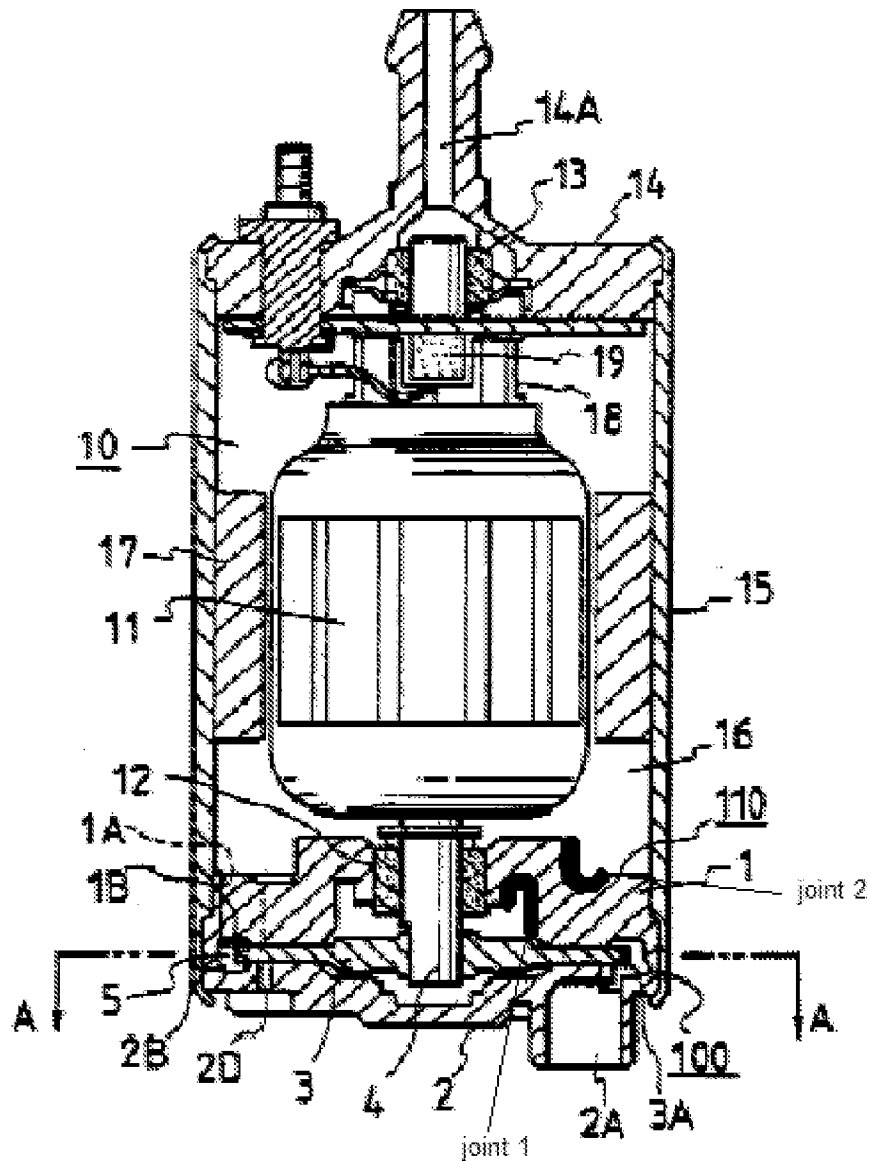
3. Claims 1, 3, 4, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,375,970 to Iwai et al. (Iwai et al.).

In Reference to Claim 1

Iwai et al. teach a fuel feed unit for a motor vehicle (see column 1 lines 5-10) having a fuel pump (see figure 1) which is driven by an electric motor (electric motor

Art Unit: 3746

(10)), and having a rotor (impeller (3)) of the fuel pump arranged between two housing parts (pump base (1) and pump cover (2)), the rotor being fastened in a rotationally fixed manner to a shaft (shaft (4)) of the electric motor, characterized in that at least one of the housing parts has an expansion joint (The pump base (1) has an axial bearing portion that abuts the shaft (4) and a radial portion that encloses the impeller. There are two joints between the axial and radial portions that would allow the assembly to expand and contract as the temperature in the pump unit increases and decreases, see the figure below).



In Reference to Claim 3

Iwai et al. teach the fuel feed unit as claimed in claim 1 (see the rejection of claim 1 above), characterized in that the housing part which faces toward the electric motor has a radial section which runs toward the shaft (the portion of the base (1) which

Art Unit: 3746

directly abuts the shaft and acts as a bearing for the shaft) and an axial section which leads away from the rotor parallel to the shaft (the portion of the dividing base (1) that encloses the impeller).

In Reference to Claim 4

Iwai et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the expansion joint is arranged on the axial section near the rotor and is embodied as a spacing of the housing part from the shaft (Joint 1, as defined in the above figure, is formed as a cut out in the axial section of the base (1), in such a way that the base is spaced from the shaft).

In Reference to Claim 5

Iwai et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 3 above), wherein the expansion joint runs over approximately half of the axial section (Joint 1, as defined in the above figure, is approximately half the height of the base (1)).

In Reference to Claim 9

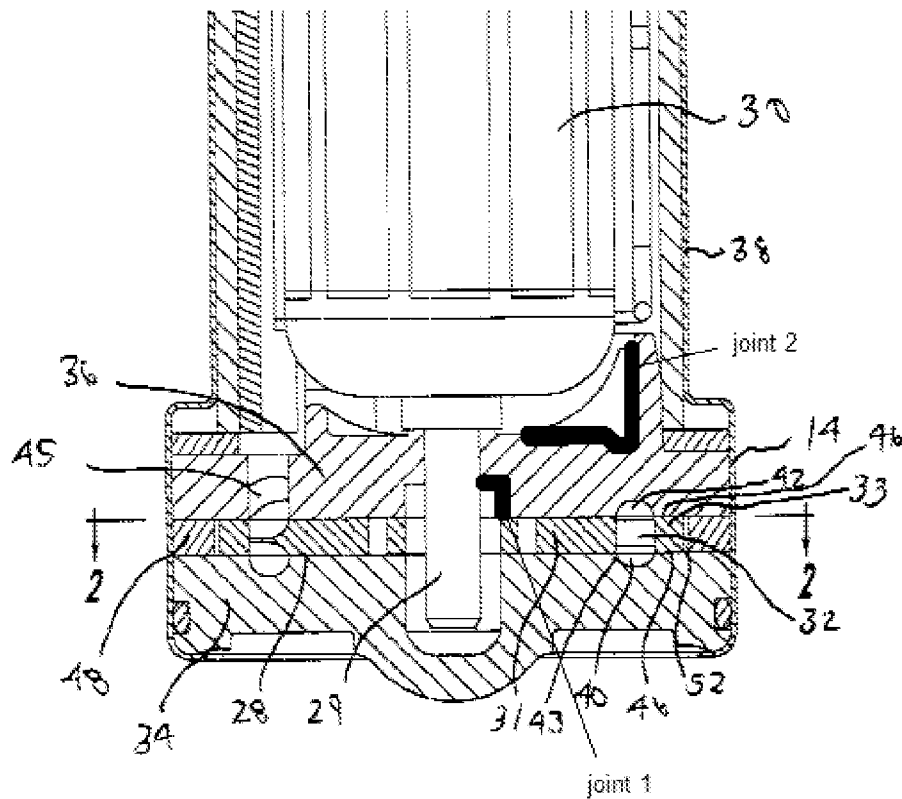
Iwai et al. teach the fuel feed unit as defined in claim 3 (see the rejection of claim 9 above), wherein the expansion joint is embodied as a groove which runs all the way around the axial section (Joint 1, as defined in the above figure, is formed as a groove which surrounds the shaft and is located in the axial section of the base (1)).

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,402,460 to Fischer et al. (Fischer et al.).

In Reference to Claim 1

Art Unit: 3746

Fischer et al. teach a fuel feed unit for a motor vehicle (see abstract) having a fuel pump (fuel pump (12)) which is driven by an electric motor (motor (30)), and having a rotor (impeller (28)) of the fuel pump arranged between two housing parts (inlet plate (34) and outlet plate (36)), the rotor being fastened in a rotationally fixed manner to a shaft (shaft (29)) of the electric motor, characterized in that at least one of the housing parts has an expansion joint (The outlet plate (36) has an axial bearing portion that abuts the shaft (29) and a radial portion that encloses the impeller. There are two joints between the axial and radial portions that would allow the assembly to expand and contract as the temperature in the pump unit increases and decreases, see the figure below).



In Reference to Claim 2

Fischer et al. teach the fuel feed unit as claimed in claim 1 (see the rejection of claim 1 above), characterized in that at least one of the housing parts is produced from plastic and in that the plastic forms a bearing shell for directly mounting the shaft (The inlet plate and outlet plates are made from a composite material with a plastic base resin material, see columns 3-4 lines 24-7).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,743,001 to Iwanari et al. and U.S. Patent Application Publication 2004/0247467 to Ito et al. teach similar fuel feed pumps.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA L. MYERS whose telephone number is (571)270-5059. The examiner can normally be reached on Monday through Friday, 8:30am to 5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/

Application/Control Number: 10/571,215

Page 11

Art Unit: 3746

Supervisory Patent Examiner, Art
Unit 3746

/JLM